PEDIATRICS

UNDER THE CHARGE OF

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The Intraperitoneal Injection of Saline Solution.—BLACKFAN and MAXCY (*Amer. Jour. Dis. Children*, January, 1918, vol. xv, No. 1) state that this method is recommended for the introduction of fluid in the treatment of the severe nutritional disorders of infants especially when, after continued vomiting and diarrhea, marked loss of body fluid results. The ordinary methods often fail because of the presence of vomiting and diarrhea. Intravenous injection is often difficult and it is rarely possible to inject a sufficient quantity without throwing too great a burden on the circulation. The authors have had little success with the subcutaneous method. The patient is placed in the recumbent position with the movements of the arms and the legs restricted by a restraining jacket. The most favorable site for the introduction of the needle is through the linea alba just below the umbilicus. The patient is prepared as for any surgical procedure. The solution is introduced by gravity. Normal salt solution at 100° F. is introduced until the abdomen is slightly distended, which requires from 100 to 250 c.c. The results are noted in a short while. A febrile reaction ranging from 100° to 101° sometimes follows this injection, but it subsides in twenty-four to forty-eight hours.

Studies of Acid Production.—SAWYER, STEVENS and BAUMANN (*Am. Jour. Dis. Children*, January, 1918, vol. xv, No. 1) say that major and minor surgical operations, infectious diseases, and diseases of the gastro-intestinal tract are accompanied by an increase of acid production. Children seem more susceptible to acidosis than adults and the authors have undertaken to prove this experimentally on a series of 10 cases. A difference in reaction toward the acid-producing diets was noted by means of the blood and urine analyses. There was also a difference in the time which elapsed before a marked response occurred. The cause of this variation was not determined. The response to the high fat diet was apparently more rapid and greater than to the low calory diet. Starvation does not always produce a marked increase of the acetone bodies in the blood of children. Prominent symptoms of acidosis may appear in less than twenty-four hours on the low calory diet. The most frequent symptoms are nausea, vomiting, drowsiness, irregularity and slowness of the pulse and an increased respiratory rate. The titratable acid of the urine, which is largely due to a preponderance of acid phosphate, increases as a result of the change in the diet before the ammonia. This is accompanied by an absolute increase in the phosphate of the urine without a compensatory decrease of the fecal output. The increased acid elimination is often followed by a period of diminished excretion and this is associated with a similar decrease of the phosphate excretion. The increase of the ammonia excretion appears on the second day after taking the acid-producing diet and lasts for several days after the resumption of the normal diet. Creatinin is practically constant and may be used as a standard to determine the accuracy of the urine collection. Creatin is uniformly increased during the period of increased acid production, which is followed by a period of markedly diminished excretion lasting several days. While the nitrogen excretion varies within wide limits, an unmistakable rise during the period of high fat feeding is present. This increase is uniformly accompanied by an increased creatin excretion and may be due to muscle break-down. In this series during the low calory period twice the amount of nitrogen ingested was eliminated through the urine and the increased elimination during the acid period was occasionally followed by retention. In a few cases qualitative test showed the presence of aceto-acetic acid four hours after the taking of the high fat diet. The carbonate values of the plasma of the blood is a reliable index of the severity of the acidosis. The combining power appears to be inversely proportional to the sum of the titratable acid. The average normal plasma carbonate value for twelve children between the ages of four and eight years was 54 volume per cent. In a general way the increase of acetone bodies in the blood is proportional to the severity of the acidosis. The glucose content of the blood is usually decreased during the period of acidosis.

The Skin and Throat Manifestations of Heine-Medin's Disease.—REGAN (*Arch. Ped.*, December, 1917, vol. xxxiv, No. 12) believes that congestion of the throat is an almost constant symptom of poliomyelitis during the early acute stage. It is, as a rule, limited to the faucial mucosa and the pharynx, while the soft palate assumes a deep red color and often a distinct violet-like hue. The surface bloodvessels are not usually congested to any great extent. This violet-like tinge varies in degree and while not by any means typical, it is somewhat distinctive of poliomyelitis when it is marked. A mild degree of inflammation of the tonsils is very common, but follicular exudation is rare, as is also true membrane formation. The uvula often appears unusually small. The buccal mucosa varies only slightly in color. The tongue is usually heavily covered with a grayish or yellowish-white coating with the tip devoid of covering. Gingivitis is present in a small proportion of cases. Rashes are frequent especially in younger children. They appear as early as the second day or as late as the fifth week. Their average duration is about four days. In distribution they show a decided tendency to localize on the trunk, especially on the neck and chest and to a lesser degree on the back, abdomen and face. Bulbar cases rarely show an eruption, but meningitic cases are frequently associated with rashes. The most common variety of rash is the pin-point to pin-head papular form. It is often preceded by a scarlatiniform eruption, which is usually easily differentiated from the rash of scarlet fever. True maculopapular type of rash is rare. When it does occur it is not easily confused with measles. Herpes labialis are rare. Desquamation is rather frequent.